

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (previously presented) A system for a dental filling material or an implant material, alternatively a system for bonding between a tooth or a bone and a dental filling material and an implant material, respectively, comprising:

a water based hydration liquid; and

a powdered material, wherein,

said powdered material comprises a binder phase that essentially consists of a calcium aluminate based cement system,

said calcium aluminate based cement system has a larger mole content of calcium than of aluminium,

said hydration liquid reacts with the binder phase to form a chemically bonded ceramic material upon saturation of said powdered material with said hydration liquid, and

at least one of said powdered material and said hydration liquid comprises water soluble phosphate or a phase that forms phosphate ions during hydration so that the system has the capacity to form apatite during hydration of said powdered material.

2. (previously presented) The system according to claim 1, wherein the system has the capacity to form, during hydration, 0.01-30 % by volume apatite in the system.

3. (previously presented) The system according to claim 1, wherein the system is a bonding system that has the capacity to form, during hydration, 0.01-60 % by volume apatite in the system.

4. (previously presented) The system according to claim 1, wherein the system has a pH of at least 7.

5. (previously presented) The system according to claim 1, wherein,

the binder phase essentially consists of a fine grain of $3\text{CaO} \cdot \text{Al}_2\text{O}_3$ having a mean particle size of less than 5 μm , and

the hydration liquid comprises phosphoric acid with tricalcium phosphate.

6-39. (cancelled)

40. (previously presented) The system according to claim 1, wherein, said calcium aluminate based cement system

further comprises at least one of aluminates, silicates, phosphates, and sulphates.

41. (previously presented) The system according to claim 1, wherein, said water soluble phosphate is an alkali phosphate.

42. (previously presented) The system according to claim 1, wherein, said powder material has a degree of compaction of at least 55 % by volume solid phase.

43. (previously presented) The system according to claim 1, wherein, said hydration liquid has a pH of at least 7.

44. (previously presented) The system according to claim 1, wherein, said hydration liquid comprises at least one of an accelerator and a superplasticizer.

45. (cancelled)

46. (previously presented) The system according to claim 1, wherein, the powdered material comprises the water soluble phosphate or the phase that forms phosphate ions during hydration.

47. (cancelled)

48. (previously presented) The system according to claim 46, wherein, said powder material comprises high-molecular proteins.

49. (previously presented) The system according to claim 46, wherein, said powder material comprises from 0.5 % and less than 10 % of a fluoride-containing phase of non difficultly soluble character.

50. (previously presented) The system according to claim 46, wherein, said powder material comprises carbonate or biologically existing ions that have the capacity to form at least one salt selected from the group consisting of calcite, aragonite, oxalates, lactates, and citrates.

51. (previously presented) The system according to claim 46, wherein, the phosphate or phosphate ion- forming phase exists as particles that are precoated by a material comprising phosphate or phosphate-containing phase.

52. (previously presented) The system according to claim 46, wherein, the phosphate or phosphate ion- forming phase

exists by the cement system comprising phosphate-containing phase in solid solution in the cement system.

53. (previously presented) The system according to claim 1, wherein,

the hydration liquid comprises water soluble phosphate or a phase that forms phosphate ions during hydration.

54-55. (cancelled)

56. (previously presented) The system according to claim 53, wherein, said water soluble phosphate comprises phosphate ions selected from the group consisting of PO_4^{3-} , HPO_4^{2-} , H_2PO_4^- , and other phosphorous-containing ions, or said water soluble phosphate is hydro-ammonium phosphate.

57. (previously presented) The system according to claim 53, wherein, said hydration liquid comprises suspended or emulsified, non hydrated or partially hydrated calcium aluminate cement, for the formation of a basic environment for the apatite.

58. (previously presented) The system according to claim 53, wherein, said hydration liquid comprises carbonate or biologically existing ions that has the capacity to form at least

one salt selected from the group consisting of calcite, aragonite, oxalates, lactates, and citrates.

59. (previously presented) The system according to claim 53, wherein, said hydration liquid comprises fluoride ions at a concentration of 0.01-5 M.

60. (cancelled)